

20031113.qrp v03_n103.qrl.20031113

Date: Thu, 13 Nov 2003 19:03:07 EST
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 3103

QRP-L Digest 3103

Topics covered in this issue include:

- 1) [161147] Re: OT: Old radio, dial cords, & signal generators
by "Dave Ek" <ekdave@earthlink.net>
- 2) [161148] Re: Altoid Tins
by "Dave Gilson" <kd3em@velocity.net>
- 3) [161149] RE: O'scope time? Maybe.
by "Henry Freedenberg" <henryf@quartz.gly.fsu.edu>
- 4) [161150] li-ion batteries..
by sergio <sergio@village-buzz.com>
- 5) [161151] Re: li-ion batteries..
by "John J. McDonough" <wb8rcr@arrl.net>
- 6) [161152] Re: OT: Old radio, dial cords, & signal generators
by Gsdavis7070@cs.com
- 7) [161153] 44 ft antenna
by "k6xr" <k6xr@bak.rr.com>
- 8) [161154] Re: li-ion batteries..
by =?ISO-8859-1?Q?John_Zaruba=A0Jr?= <aa2bn@comcast.net>
- 9) [161155] FOX: K0UU log
by Jeff Strandberg <wv3b@us.net>
- 10) [161156] OT: PC Power Supply Schematic????
by "Mark E. Smith" <marymark4@comcast.net>
- 11) [161157] RE: Speaking of the Andy Griffith Show reunion...anybody else see
that fine HW-16 on the desk?
by <dswenson@wearne.net>
- 12) [161158] Heath HW-7 Value?
by "W. Keith Hibbert" <wkhibbert@frontiernet.net>
- 13) [161159] RE: KX1 & "lasso" antenna worked best
by "Niel Skousen" <skousen@srv.net>
- 14) [161160] Re: PC Power Supply Schematic????
by "Larry Przyborowski" <k3peg@comcast.net>
- 15) [161161] Re: FOX: K0UU log
by "Lew Paceley" <lew@paceley.com>
- 16) [161162] Re: KX1 & "lasso" antenna worked best
by Wayne Burdick <n6kr@elecraft.com>
- 17) [161163] Re: Heath HW-7 Value?
by w5xe@juno.com
- 18) [161164] Re: 44 ft antenna
by Karl Larsen <k5di@zianet.com>

- 19) [161165] Re: Altoid Tins
by w5xe@juno.com
- 20) [161166] Hamradio IP numbers
by Karl Larsen <k5di@zianet.com>
- 21) [161167] The 44 ft antenna for 40 - 15m:
by "sslyon" <sslyon@megalink.net>
- 22) [161168] RE: Speaking of the Andy Griffith Show reunion...anybody else see
that fine HW-16 on the desk?
by "JBCrafts" <jbcraft@adelphia.net>
- 23) [161169] Re: Hamradio IP numbers
by <ah7i@atl.org>
- 24) [161170] Iowa QRP Club CW Net
by Mark Milburn <mark.milburn@ispwest.com>
- 25) [161171] Re: Hamradio IP numbers
by Bob Nielsen <nielsen@oz.net>
- 26) [161172] DAVCO DR-30 LISTED ON EBAY
by "James Kelley" <k4ybb@earthlink.net>
- 27) [161173] Re: Hamradio IP numbers
by "M.M." <markem@cox.net>
- 28) [161174] DSW-2 Power out
by "Lee Hopper" <leehopp@msn.com>
- 29) [161175] Re: Hamradio IP numbers
by Jim Pruitt <PruittJ@cwu.EDU>
- 30) [161176] FS: Zapchecker wireless installation meter
by "Lee Hopper" <leehopp@msn.com>
- 31) [161177] RE: li-ion batteries..
by "Nick Foster" <nfoster@bluefinrobotics.com>
- 32) [161178] Re: KX1 Queations
by Wayne Burdick <n6kr@elecraft.com>
- 33) [161179] Re: DSW-2 Power out
by "Joseph Trombino Jr" <w2kj@bellsouth.net>
- 34) [161180] Re: DAVCO DR-30 LISTED ON EBAY
by John Sielke <jsielke@pobox.com>
- 35) [161181] travel to N. Ireland
by "David Hinerman" <WD8CIV@worldnet.att.net>
- 36) [161182] [CONTEST] N2CQ QRP Contest Calendar Nov 15-31, 2003
by "Ken Newman" <n2cq@dandy.net>
- 37) [161183] Re: travel to N. Ireland
by "John J. McDonough" <wb8rcr@arrl.net>
- 38) [161184] Re: KX1 Queations
by "Doug Hendricks" <ki6ds@dpol.net>
- 39) [161185] Re: KX1 Queations
by JClinton46@aol.com
- 40) [161186] WANTED: HEATHKIT HW-9 WARC KIT
by "=?iso-8859-1?q?Miguel=20Angel=20D.J.?= " <ea1bp@yahoo.es>
- 41) [161187] Re: Hamradio IP numbers
by Bob Nielsen <nielsen@oz.net>
- 42) [161188] Re: travel to N. Ireland

- by Bob Nielsen <nielsen@oz.net>
43) [161189] Invitation to MQFD group
by Rick McKee <kc8aon@juno.com>
44) [161190] Re: travel to N. Ireland
by Kevin Gunther <beeltee@optonline.net>
45) [161191] Re: KX1 Queations
by "Alan Fryer" <N3BJ@hotmail.com>
46) [161192] The 44/88 Foot Dipole expanded for 160 Meters?
by "Mike Duke, K5XU" <k5xu@jam.rr.com>

Date: Wed, 12 Nov 2003 17:22:44 -0700
From: "Dave Ek" <ekdave@earthlink.net>
To: "QRP-L" <qrp-l@lehigh.edu>
Subject: [161147] Re: OT: Old radio, dial cords, & signal generators
Message-ID: <004c01c3a97c\$423208c0\$6801a8c0@dad>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Gang,

Thanks for all the replies--I have the info I needed.

73 de Dave NK0E

Date: Wed, 12 Nov 2003 20:16:44 -0500
From: "Dave Gilson" <kd3em@velocity.net>
To: <pwomble@earthlink.net>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [161148] Re: Altoid Tins
Message-ID: <000901c3a983\$cddcdeaa0\$3b697841@yourw92p4bhlzg>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

How many are you looking for?. I have a few like 10 or 20 have not counted but more the ten and less then 20 I think. Let me know if you want any.

72 de Dave KD3EM/QRP

----- Original Message -----

From: "Paul Womble" <pwomble@earthlink.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Wednesday, November 12, 2003 5:54 PM
Subject: Altoid Tins

> Does anyone have a source for Altoid type tins...other than buying them
> from the store with the mints?
>
> I've been checking out the holiday tins at WalMart but most of them are
> a lot larger than what I want. I did buy a couple of small ones there
> for \$1. Trying to decide if I want to paint it or just leave Santa on
> my next project!
>
> 73
> Paul K4FB
>

Date: Wed, 12 Nov 2003 20:24:37 -0500
From: "Henry Freedenberg" <henryf@quartz.gly.fsu.edu>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>,
w1rfi@arrl.org
Subject: [161149] RE: O'scope time? Maybe.
Message-ID: <3FB29705.28639.64FAFB@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Content-description: Mail message body

Hi Ed

As the SIAM article points out, simultaneously sniping and submitting a proxy bid is an extremely inefficient way to do business. A proxy bid invites someone to snipe you. This is all covered in the article.

I am not in a position to judge the ethics of sniping. Before I started sniping I would regularly loose auctions in the last minute. I would because I was unable to respond to the bids of snipers. I still loose auctions but now when I loose, it is because someone thinks that the article is worth more than I do. Isn't this what an auction is

supposed to be about? One very positive consequence of sniping is the elimination of the last minute "feeding frenzy" effect.

As pointed out in the SIAM paper, game theory clearly dictates that sniping is the way to go.

The paper is definitely worth reading.

Meanwhile....

Ed, I am planning to be at the Orlando Hamcation in February. If it comes down to it, could I request that the ARRL rep bring down some specific pubs for me to purchase? I am thinking about Loftness' AC Power Interference book but I won't now until the date gets closer.

Tnx

Henry

On 11 Nov 2003 at 18:32, Hare,Ed, W1RFI wrote:

> The trick is to use both sniping and proxy techniques. If you set up
> a proxy bid that truly represents what you would be willing to pay for
> the item, then snipe it, you have a good chance of winning and won't
> have to pay more than necessary for the item.

>

> Think of it this way. If an item is at \$1.00 near the end of the
> auction, someone may snipe it, but bid \$2.00, hoping to get a real
> deal. If you would be willing to pay \$100.00 for the item, proxy it
> for \$100.00. You will probably get it for \$3.00. Even the next lower
> bidder sniped it for \$90, you will still win, but you will just have
> to pay more money.

>

>

> 73,
> Ed Hare, W1RFI
> ARRL Lab
> 225 Main St
> Newington, CT 06111
> Tel: 860-594-0318
> Internet: w1rfi@arrl.org
> Web: <http://www.arrl.org/tis>

>

>

>
> > -----Original Message-----
> > From: Henry Freedenberg [mailto:henryf@quartz.gly.fsu.edu]
> > Sent: Tuesday, November 11, 2003 4:21 PM
> > To: Low Power Amateur Radio Discussion
> > Subject: Re: O'scope time? Maybe.
> >
> >
> > If you bid on ebay, you need to read this paper on the SIAM
> > (Society for Industrial
> > and Applied Mathematics) website.
> >
> > <http://www.siam.org/siamnews/03-03/auctions.htm>
> >
> > My success increased dramatically after I began using sniping
> > software. I have had
> > good luck with JustSnipe! but there are lots fo programs out
> > there that will get the job
> > done.
> >
> > Henry
> >
> > On 11 Nov 2003 at 8:02, John J. McDonough wrote:
> >
> > >
> > > The challenge with eBay is that it does take a lot of attention.
> > > Quite often the price of something will get bid way up in
> > > the last few
> > > minutes, and you don't want to get suckered into going higher than
> > > your plan when that happens. There are a LOT of nice
> > > scopes on eBay,
> > > so it's not such a big deal to loose the bid. Just be persistent.
> > > Also, keep an eye on the completed auctions to see what the actual
> > > prices ended up at. You will see quite a range, which will help
> > > you understand what it will take to land the scope you want.
> > > But be sure
> > > to read the fine print on the low priced ones ... not all are in
> > > perfect shape.
> >
> >
>

Date: Wed, 12 Nov 2003 19:29:29 -0500
From: sergio <sergio@village-buzz.com>

To: qrp-1@Lehigh.EDU
Subject: [161150] li-ion batteries..
Message-ID: <5.2.1.1.0.20031112192515.02274ef0@mail.neobright.net>
Mime-Version: 1.0
Content-Type: text/plain; x-avg-checked=avg-ok-8502E26; charset=us-ascii;
format=flowed

i have a yaesu vx-1r that i bought from ebay..

unfortunately, it did not come with a battery charger..

i got the battery charger, and it works as an ac adapter, but the battery charger part seems to have problems.. i would like to figure out if it is the charger circuit, or of the battery is just dead..

after charging, there is still no voltage on the battery.... but it could still be the chargin circuitry..

is there any way i can test the battery alone without messing it up? is there anything special about the charging circuitry? can i just hook a voltage to it?

thanks!

peace,
sergio
www.village-buzz.com - "the village buzz"
www.coffee-black.com - rock photo!
<http://www.coffee-black.com/join.htm> <-- Join Picture of the Day!

phone ... 419 606 0557
www.amazon.com/o/registry/3L7DM7FMR50QU <- buy me some swag!

Date: Wed, 12 Nov 2003 20:47:03 -0500
From: "John J. McDonough" <wb8rcr@arrl.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Cc: <sergio@village-buzz.com>
Subject: [161151] Re: li-ion batteries..
Message-ID: <03e401c3a988\$0a285e50\$090044c0@BrianBoru>
MIME-Version: 1.0
Content-Type: text/plain;

charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Lithium Ion batteries are very dangerous things. If you overcharge them they can catch fire or explode. The fire cannot be extinguished with water or any normal extinguisher, and gives off toxic fumes. Be very careful.

Typically the batteries are matched to the charger and between them have triply redundant overcharge protection to avoid that problem.

Be very careful!

72/73 de WB8RCR <http://www.qsl.net/wb8rcr>
didileydadidah QRP-L #1446 Code Warriors #35

----- Original Message -----

From: "sergio" <sergio@village-buzz.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Wednesday, November 12, 2003 7:29 PM
Subject: li-ion batteries..

>
> i have a yaesu vx-1r that i bought from ebay..
>
> unfortunately, it did not come with a battery charger..
>
> i got the battery charger, and it works as an ac adapter, but the battery
> charger part seems to have problems.. i would like to figure out if it is
> the charger circuit, or of the battery is just dead..
>
> after charging, there is still no voltage on the battery.... but it could
> still be the chargin circuitry..
>
> is there any way i can test the battery alone without messing it up? is
> there anything special about the charging circuitry? can i just hook a
> voltage to it?
>
> thanks!
>
>
> ---
> peace,
> sergio
> www.village-buzz.com - "the village buzz"
> www.coffee-black.com - rock photo!
> <http://www.coffee-black.com/join.htm> <-- Join Picture of the Day!
>

> phone ... 419 606 0557
> www.amazon.com/o/registry/3L7DM7FMR50QU <- buy me some swag!
>
>

Date: Wed, 12 Nov 2003 21:03:55 EST
From: Gsdavis7070@cs.com
To: ekdave@earthlink.net, qrp-1@lehigh.edu
Subject: [161152] Re: OT: Old radio, dial cords, & signal generators
Message-ID: <125.27745f5c.2ce4408b@cs.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

How much dial cord do you want? Gordy NW0Y

Date: Wed, 12 Nov 2003 18:48:53 -0800
From: "k6xr" <k6xr@bak.rr.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [161153] 44 ft antenna
Message-ID: <FJEMKMMDBGDJFBIEBAJOEDNDLAA.k6xr@bak.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

anyone using a 44' dipole can comment on how well it works 40-10 meters?

Reggie K6XR in Bakersfield, Ca
48 years enjoying ham radio
K1-4 1512
Norcal 2306
Qrpp 8701
ARS 1545
Fp 620
Fists 10183
ARRL RCC

Date: Wed, 12 Nov 2003 21:52:54 -0500
From: =?ISO-8859-1?Q?John_Zaruba=A0Jr?= <aa2bn@comcast.net>
To: sergio@village-buzz.com
Cc: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [161154] Re: li-ion batteries..
Message-ID: <7A820283-1584-11D8-859D-003065C74F1A@comcast.net>
Mime-Version: 1.0 (Apple Message framework v606)
Content-Type: text/plain; charset=US-ASCII; format=flowed
Content-Transfer-Encoding: 7bit

Sergio,

I've had a VX-1 for about 5 years now, and one thing I found was the battery needs to be replaced about every 12 to 18 months. I have found that it doesn't matter how many times the battery is charged, they seem to lose their capacity in 12 to 18 months.

73,

John AA2BN

On Nov 12, 2003, at 7:29 PM, sergio wrote:

>
> i have a yaesu vx-1r that i bought from ebay..
>
> unfortunately, it did not come with a battery charger..
>
> i got the battery charger, and it works as an ac adapter, but the
> battery charger part seems to have problems.. i would like to figure
> out if it is the charger circuit, or of the battery is just dead..
>
> after charging, there is still no voltage on the battery.... but it
> could still be the chargin circuitry..
>
> is there any way i can test the battery alone without messing it up?
> is there anything special about the charging circuitry? can i just
> hook a voltage to it?
>
> thanks!
>
>

> ---
> peace,
> sergio
> www.village-buzz.com - "the village buzz"
> www.coffee-black.com - rock photo!
> http://www.coffee-black.com/join.htm <-- Join Picture of the Day!
>
> phone ... 419 606 0557
> www.amazon.com/o/registry/3L7DM7FMR50QU <- buy me some swag!
>
>

Date: Wed, 12 Nov 2003 22:17:56 -0600
From: Jeff Strandberg <wv3b@us.net>
To: qrp-l@lehigh.edu
Subject: [161155] FOX: K0UU log
Message-ID: <1068697076.3fb305f40b138@webmail.us.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8bit

An A Index of 10 is looking better ...

K0UU FOX LOG 11/12/03

UTC	CALL	RST	ST	OP PWR	NOTE
0202	K0EVZ	559	NM	Doc	5W
0203	N5IB	559	LA	Jim	5W
0204	K5EOA	559	LA	Wayne	5W
0205	N5ZE	599	TX	Leo	5W
0207	W2XN	559	FL	Fred	5W
0208	KK5LD	559	TX	Dean	5W
0230	K5PSH	559	TX	Jerry	5W
0233	N1TP	559	FL	Tom	5W
0235	K5ZTY	559	TX	Dill	5W
0247	W5JAY	579	AR	Jerry	1W
0251	K0PC/M	599	MN	Pat	5W
0252	W5YR	559	TX	George	5W
0255	K5DW	339	TX	Don	5W
0307	W0ANM	569	MN	Chris	5W
0309	AC5JH	559	OK	Tom	5W
0312	AC7A	559	AZ	Tom	5W
0313	N4DD	559	TN	Dennis	5W

0320	K5JHP	559	TX	Bill	5W	
0323	KD5KXF	339	TX	Mike	5W	
0332	AA50	559	LA	Vern	5W	
0338	AA7EQ	559	AZ	Bob	5W	
0341	W0CH	559	MO	Dave	5W	
0400	KR0U	559	CO	TC	5W	FOX
0400	K0UU	559	MN	Jeff	5W	FOX

 This mail sent through IMP: <http://horde.org/imp/>

Date: Wed, 12 Nov 2003 19:07:45 -0800
 From: "Mark E. Smith" <marymark4@comcast.net>
 To: qrp-1@lehigh.edu
 Subject: [161156] OT: PC Power Supply Schematic????
 Message-ID: <3FB28501.21780.1FD13A@localhost>
 MIME-Version: 1.0
 Content-type: text/plain; charset=US-ASCII
 Content-transfer-encoding: 7BIT
 Content-description: Mail message body

Does any anyone out there have the schematic for a garden variety
 PC power supply that could be e-mailed to me?

I just upgraded my computer from Windows 98 to Windows XP
 Home Edition. XP doesn't think my cooling fan needs to run all the
 time. I think, or at least, I want it to. I believe I have done
 everything in software that I can do, but XP insists on turning the
 fan off as soon as the Windows screen appears. I have gone into
 the Bios and made sure that it calls for the fan to be on all the time,
 to no avail. I also turned off the Power Management stuff, to no
 avail. XP overpowers everything I have tried.

So now I want to do a hardware fix, so I need a power supply
 schematic so I can figure out which wires do what.

Thanks in advance,

Mark Smith W7MTP Pleasanton, CA

 Date: Wed, 12 Nov 2003 21:09:07 -0600
 From: <dswenson@wearne.net>
 To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
 Subject: [161157] RE: Speaking of the Andy Griffith Show reunion...anybody else

see that fine HW-16 on the desk?

Message-ID: <NDBBJMPBEGLEHBGHA0AAEECMANAC.dswenson@wearne.net>

MIME-Version: 1.0

Content-Type: text/plain;
charset="us-ascii"

Content-Transfer-Encoding: 7bit

I believe the unit on top of the HW-16 was an old Motorola "DC Remote" console. They were used to remote control 2-way base stations using "dry pair" phone lines. (-2.5 ma for monitor, +6 ma for F1 TX, +12 ma for F2 TX.) There were still a few left in service when I worked for a Motorola MSS in the 80s. The "V" was normally an "M"... the prop guys must have "repaired" it. The mic to the left of the unit was definitely Motorola of the same vintage. There were also a few 5-10 watt (QRP!!!) "control stations" packaged in the same enclosure.

The police/sheriff's office in my home town used 3 of those remotes as their dispatch console when I was in high school.

My hometown dispatch also had an old Heathkit HF rig of some kind sitting in back of the office. I believe they were Civil Defense units of some kind. I think they were CW only... but no-one at the PD/SO knew Morse. I guess they called a ham in if they had an emergency and needed to use it.

The remotes controlled 39/44 MHz FM radios... the base transmitted on one frequency, the mobile on another, a 3rd frequency was used for "Point to Point" messages, before wireline TTY circuits became common place. Most of the bases had 2 receivers and a 2 frequency transmitter, mounted in a 19" wide 6 feet tall cabinet (I still have one of those.)

Neat stuff from a bygone era... Our local PD even had our own "Barney Fife"... He shot a hole in the PD's file cabinet while demonstrating "proper firearms handling" to my boy scout troop. (He didn't last as long as Barney did...!!!)

Darrel... K0AWB...

-----Original Message-----

From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf Of rattray

Sent: Wednesday, November 12, 2003 10:32 AM

To: Low Power Amateur Radio Discussion

Subject: RE: Speaking of the Andy Griffith Show reunion...anybody else see that fine HW-16 on the desk?

Yes, I saw that too...it sure was in a lot of shots...I was wondering what the unit was on top of it?...looked familiar somehow...72 - Bruce ve5rc/ve5qrp

-----Original Message-----

From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU] On Behalf Of Curt Milton
Sent: Wednesday, November 12, 2003 9:37 AM
To: Low Power Amateur Radio Discussion
Subject: Re: Speaking of the Andy Griffith Show reunion...anybody else see that fine HW-16 on the desk?

Yes i was inspired by the HW-16 (but not Opey's hair - next subject please!) and maybe I will open the cover of mine and look for some replacement caps (if i can afford them vs. a new qrp rig!). Even the xyl thought that rig looked familiar (it is only about 15 feet from our TV).

I think i stopped using my HW-16 because (1) i don't have a high voltage keyer and (2) the time it takes to warm up. It either needs fixing or a new home, and i am leaning toward the former again. As for my HW-8, well its not being used these days and at least the HW-16 is a superhet.

We can give them credit for using a ham rig on the bottom to replace the other ham rig that was there before!

curt wb8yyy

Do you Yahoo!?
Protect your identity with Yahoo! Mail AddressGuard
<http://antispam.yahoo.com/whatsnewfree>

Date: Wed, 12 Nov 2003 22:23:05 -0500
From: "W. Keith Hibbert" <wkhibbert@frontiernet.net>
To: qrp-1@lehigh.edu

Subject: [161158] Heath HW-7 Value?

Message-ID: <5.1.0.14.0.20031112221813.009fb790@pop3.frontiernet.net>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"; format=flowed

Hi. Keith here in the Depths of the Great Bergen Swamp

Larry, KA2WB0 just bought a Heath HW-7 from an auction. He paid \$60 for the rig. It's stock, no mods and works just fine. He got a copy of the construction manual and has the original operator's guide.

Personally, I think he got a very good deal for the price, and for a collector, it probably would have been a steal (except for the manual). What is a good range for a clean HW-7?

I Googled this already and only found old price lists and broken links.

73, Keith, WB2VU0, Trustee of the NQ2RP/B 10-Meter Beacon
28.2873 MHz on Your Radio Dial - 24/7

Date: Wed, 12 Nov 2003 22:24:25 -0500

From: "Niel Skousen" <skousen@srv.net>

To: <qrp-l@lehigh.edu>, <elecraft@mailman.qth.net>

Subject: [161159] RE: KX1 & "lasso" antenna worked best

Message-ID: <NFBBI LMKOLCLMCKFACLDCEJLMIAA.skousen@srv.net>

MIME-Version: 1.0

Content-Type: text/plain;
charset="US-ASCII"

Content-Transfer-Encoding: 7bit

Wayne:

Did you close the lasso loop electrically ?

If so I wonder whether this would then become a short capacitively loaded vertical, or what ?

If physically closed, but not electrically connected (eg the end of 28ga enamel twisted around the wire...) then it might be approximated as a DDRR or 'hula hoop' of days gone by. The twisted 28 ga would probably have about .5~1pf per inch and would be similar to the tuning capacitor found at the end of some DDRR configurations. A well constructed DDRR had very good performance for a short antenna. I used the configuration in a special purpose multiband VHF antennas at work a few years back. In field tests

the were within a dB or so of a full size tuned 1/4 monopole - at ~1/6th the height.

The fractal antenna 's (and their on-glass, invisible cousins) are another antenna type to be considered in a comparative analysis of the 'lasso' !

This one I will try too !

Thanks
Niel

PS: got KX1 #159 last Thur, and the jr op should have it finished tomorrow for my next trip. It is going to be great !! I only have one problem. My 13yr old wont let me build anymore of my own elecraft kits. He did a portion of my K2 (#96), did all the options as they showed up, and stoutly defends his 'rights' to any of these kits.

-----Original Message-----

From: elecraft-admin@mailman.qth.net
[mailto:elecraft-admin@mailman.qth.net]On Behalf Of Wayne Burdick
Sent: Sunday, November 09, 2003 7:15 PM
To: wjohnson@dcwis.com
Cc: elecraft@mailman.qth.net
Subject: [Elecraft] KX1: "lasso" antenna worked best

Bill,

I initially tried a true loop, but it didn't load as well as a "lasso" (closed loop with a single-wire tail running to the KX1's antenna jack). The room is probably 14 x 15'. For a ground, I used a 12' piece of hookup wire, but I'm thinking about trying the ground screw on a nearby AC outlet panel. (Do try this at home! But be careful....).

Wayne

"Bill Johnson (WR Johnson Consulting)" wrote:

>
> Wayne, what length did you use to wall mount? I am thinking about putting
> up a loop! ;-} I could skip the ground counterpoise.
>
> Bill
> K9YEQ

--

<http://www.elecrafter.com>

Elecrafter mailing list: Elecrafter@mailman.qth.net

You must be subscribed to post to the list.

To subscribe or unsubscribe see:

<http://mailman.qth.net/mailman/listinfo/elecrafter>

Elecrafter Web Page: <http://www.elecrafter.com>

Also see: http://www.elecrafter.com/elecrafter_list_guidelines.htm

Date: Wed, 12 Nov 2003 22:41:30 -0500

From: "Larry Przyborowski" <k3peg@comcast.net>

To: <flyer@value.net>,

"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>

Subject: [161160] Re: PC Power Supply Schematic????

Message-ID: <006a01c3a998\$06868c30\$6401a8c0@K3PEGMAIN>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Hi Mark,

Take a look at this link:

<http://web2.murraystate.edu/andy.batts/ps/PowerSupply.htm>

No schematic, but I hope this info helps you out.

73, Larry

> Does any anyone out there have the schematic for a garden variety

> PC power supply that could be e-mailed to me?

> Mark Smith W7MTP Pleasanton, CA

Date: Wed, 12 Nov 2003 22:02:45 -0600

From: "Lew Paceley" <lew@paceley.com>

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: [161161] Re: FOX: K0UU log

Message-ID: <009a01c3a99b\$00f3ab60\$6501a8c0@swbell.net>

MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Hi Jeff,
Tnx fer the Fox QSO on Tuesday. Condx were as rough as I've seen in
awhile. You were strong here early in the hunt but my friends in
Dallas struggled to catch you at the end. Which is odd, usually 40m
goes long that time of evening and MN is stronger, not weaker.

One small log correction for N5ZE. The name is Lew not Leo...off by a
dah :-)

I truly appreciate your diligence in sticking with the hunt for 2 long
hours!

72/73,
Lew
N5ZE

Date: Wed, 12 Nov 2003 20:10:14 -0800
From: Wayne Burdick <n6kr@elecraft.com>
To: skousen@srv.net
Cc: qrp-1@lehigh.edu, elecraft@mailman.qth.net
Subject: [161162] Re: KX1 & "lasso" antenna worked best
Message-ID: <3FB30422.8A004FCE@elecraft.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Niel,

Niel Skousen wrote:

> Did you close the lasso loop electrically ?

Yes.

> If so I wonder whether this would then become a short capacitively loaded
> vertical, or what ?

Exactly.

> If physically closed, but not electrically connected (eg the end of 28ga
> enamel twisted around the wire...) then it might be approximated as a DDDR
> or 'hula hoop' of days gone by. The twisted 28 ga would probably have about
> .5~1pf per inch and would be similar to the tuning capacitor found at the
> end of some DDDR configurations. A well constructed DDDR had very good
> performance for a short antenna....

It would be worth trying both ways.

73,
Wayne
N6KR

--

<http://www.elecrafter.com>

Date: Wed, 12 Nov 2003 21:23:06 -0700
From: w5xe@juno.com
To: qrp-1@lehigh.edu
Subject: [161163] Re: Heath HW-7 Value?
Message-ID: <20031112.212306.-677879.36.w5xe@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I went to the site below:

<http://www.d8apro.com/bluebook.htm>

Looks like your friend got a pretty good deal.
The bluebook page shows for 41 recent items
(hw-7), the highest in the past year was 129 while
the lowest was 37. Giving an average of about
78 dollars; 90 day average was 85 dollars.

73
Ray

Date: Wed, 12 Nov 2003 22:11:11 -0700 (MST)

From: Karl Larsen <k5di@zianet.com>
To: k6xr <k6xr@bak.rr.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [161164] Re: 44 ft antenna
Message-ID: <Pine.LNX.4.44.0311122208570.4681-100000@bucket.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 12 Nov 2003, k6xr wrote:

> anyone using a 44' dipole can comment on how well it works 40-10 meters?

I use that at our summer house and it works great. I feed it in the center with 450 ohm ladder line to a 4-1 toriod balun to rg-58 to my automatic tuner and it tunes up anywhere between 7 and 30 MHz.

>
>
>
>
> Reggie K6XR in Bakersfield, Ca
> 48 years enjoying ham radio
> K1-4 1512
> Norcal 2306
> Qrpp 8701
> ARS 1545
> Fp 620
> Fists 10183
> ARRL RCC
>
>
>
>
>
>
>

--

- Karl Larsen k5di Las Cruces,NM Az ScQRPions -

Date: Wed, 12 Nov 2003 23:17:05 -0700
From: w5xe@juno.com
To: pwomble@earthlink.net, qrp-1@lehigh.edu
Subject: [161165] Re: Altoid Tins

Message-ID: <20031112.231706.-677879.42.w5xe@juno.com>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

You might check the Celestial Tea section of the stores as they periodically come out with small boxes, different designs and are about 1/3 to 1/2 smaller than Altoids.

I have an Atomic Keyer with a AAA battery in one - only problem is it is easy to lose track of amongst other stuff.

73

Ray

"Politicians are like nappies. Both should be changed regularly -- and for the same reason"

"Scotsman - Scotsman's Diary 12/97"

Ray Colbert, W5XE, 00TC#3618, SOWP#1064M GQRP 6115

fp #111 ARCI-5784 NCT2R El Paso, (FAR WEST) TEXAS

Date: Thu, 13 Nov 2003 05:52:08 -0700 (MST)

From: Karl Larsen <k5di@zianet.com>

To: qrp-l@lehigh.edu

Subject: [161166] Hamradio IP numbers

Message-ID: <Pine.LNX.4.44.0311130547570.4684-100000@bucket.dog>

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

I need to check somewhere and find out if any of the 44.30.x.x ip numbers are assigned to k5di any more. In the packet radio days I got several for my netrom nodes and such. I need now to set up my ax25 network for an aprs network on linux.

--

- Karl Larsen k5di Las Cruces, NM Az ScQRPions -

Date: Thu, 13 Nov 2003 09:33:02 -0500

From: "sslyon" <sslyon@megalink.net>

To: "qrp list" <qrp-l@lehigh.edu>

Subject: [161167] The 44 ft antenna for 40 - 15m:

Message-ID: <000701c3a9f3\$0b8c5880\$abc7e742@megalink.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

COMPLETELY SUBJECTIVE, BIASED OPINION

The 44' doublet is an excellent multi-band performer and IMHO, better than alternative configurations of wire approx. same length. An 88' is even better. I've used most other configs and like the non-resonant wires best.

Comments:

- 1.) I generally don't operate where I can't get a wire up >1/4 w.l., pref. >1/2 w.l.
- 2.) I prefer parallel, center feed and tuner, pref. Z-Match, w/indicator to show if things are working ok.
- 3.) Non-resonant wires interact less with other nearby antennas.
Nice in crowded circumstances.
- 4.) They also provide gain on bands above cut freq. An 88' on 30/20/15m will scare you.
- 5.) No counterpoise or radials are required for c.f., tho I try to use a ground for static safety.
- 6.) Over 45 yrs of trying and I have never had an end fed wire work as well as a c.f. wire. I use end feed as a last resort or expedient and they do work, sometimes surprisingly well.

73/72
seab
aa1my

Date: Thu, 13 Nov 2003 09:47:02 -0500
From: "JBCrafts" <jbcraft@adelphia.net>
To: <dswenson@wearne.net>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [161168] RE: Speaking of the Andy Griffith Show reunion...anybody else see that fine HW-16 on the desk?
Message-ID: <AGEJJBFLPLHMOECFDINOGEJGDOAA.jbcraft@adelphia.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

I do not know about the rest of the USA, but here in Ohio, they used to use CW for a state wide net...

The City of Cincinnati used to employ several CW ops. I think that last CW op retired in 1966 or so... unfortunately, the two that I knew of are now both SK.

Bob K8YS

Date: Thu, 13 Nov 2003 09:44:06 -0500 (EST)
From: <ah7i@atl.org>
To: Karl Larsen <k5di@zianet.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [161169] Re: Hamradio IP numbers
Message-ID: <Pine.LNX.4.33.0311130943180.19834-100000@localhost.localdomain>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

<http://www.easywhois.com/index.php?domain=44.30.0.0>

73,
-Bob
ah7i

On Thu, 13 Nov 2003, Karl Larsen wrote:

>
> I need to check somewhere and find out if any of the 44.30.x.x
> ip numbers are assigned to k5di any more. In the packet radio days I got
> several for my netrom nodes and such. I need now to set up my ax25
> network for an aprs network on linux.
>
>

Date: Thu, 13 Nov 2003 09:18:03 -0600
From: Mark Milburn <mark.milburn@ispwest.com>
To: QRP-L List <qrp-l@lehigh.edu>

Subject: [161170] Iowa QRP Club CW Net
Message-ID: <3FB3A0AB.EB1611E0@ispwest.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Not too bad of a night, despite the windy conditions and some strange QRM that sounded like freight trains approaching. In the net were:

KQ0I	Mark	Iowa
WA8BXN	Mike	Ohio
NI0I	Tom	S.D.
WA0ITP	Terry	Iowa
WB0T	Jerry	Iowa
W5USJ	Chuck	Texas

As usual, there was at least one more station trying to get in that I just couldn't pull out. Don't give up, my friend. If the QRM had been less you would have been readable.

Thanks to all who support the net and keep it going. See you next week.

--

72 Mark KQ0I
Des Moines, Iowa
packet: KQ0I@KQ0I.#CIA.IA.USA.NOAM
Instant Messenger: markkq0i

Date: Thu, 13 Nov 2003 09:01:52 -0800
From: Bob Nielsen <nielsen@oz.net>
To: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [161171] Re: Hamradio IP numbers
Message-ID: <20031113170152.GA28360@n7xy.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

On Thu, Nov 13, 2003 at 09:44:06AM -0500, ah7i@atl.org wrote:

>
> <http://www.easywhois.com/index.php?domain=44.30.0.0>
>
> 73,
> -Bob
> ah7i
>

>
> On Thu, 13 Nov 2003, Karl Larsen wrote:
>
> >
> > I need to check somewhere and find out if any of the 44.30.x.x
> > ip numbers are assigned to k5di any more. In the packet radio days I got
> > several for my netrom nodes and such. I need now to set up my ax25
> > network for an aprs network on linux.
> >

That only gives the TLD information. This file lists all the 44.0.0.0
entries: <ftp://ftp.ucsd.edu/ampr.org>.

I couldn't connect to that server just now, but the copy I have from
February 2003 shows:

cab	IN	CNAME	cab.k5di
cab.k5di	IN	A	44.30.2.3
k5di	IN	A	44.30.2.5
mobile.k5di	IN	A	44.30.2.6
rover.k5di	IN	A	44.30.2.4

A lookup of those IPs shows they still exist in the DNS system.

You don't need a 44 address for APRS, but Linux does require an IP
assigned to the interface. I used a 192.168.x.x address when setting
up ax25 for my dx cluster on a frequency where there is no tcp/ip
activity.

73,
Bob N7XY

Date: Thu, 13 Nov 2003 12:37:28 -0500
From: "James Kelley" <k4ybb@earthlink.net>
To: qrp-l@lehigh.edu
Subject: [161172] DAVCO DR-30 LISTED ON EBAY
Message-ID: <410-2200311413173728902@earthlink.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII

Folks; there is a DAVCO DR-30 on ebay. Closing in on \$300 and still 5 days
until close.

James Kelley

k4ybb@earthlink.net
Why Wait? Move to EarthLink.

Date: Thu, 13 Nov 2003 11:39:19 -0700
From: "M.M." <markem@cox.net>
To: qrp-l@Lehigh.EDU
Subject: [161173] Re: Hamradio IP numbers
Message-ID: <6.0.0.22.0.20031113113711.026a6308@pop.west.cox.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 10:01 11/13/03, Bob Nielsen wrote:

>That only gives the TLD information. This file lists all the 44.0.0.0
>entries: <ftp://ftp.ucsd.edu/ampr.org>.
>
>I couldn't connect to that server just now, ...

Try ftp://ftp.ucsd.edu/hamradio/ampr.org. They musta moved it...

73... Mark AA7TA

Date: Thu, 13 Nov 2003 10:42:32 -0800
From: "Lee Hopper" <leehopp@msn.com>
To: "Posting to the list QRP-L" <qrp-l@Lehigh.EDU>
Subject: [161174] DSW-2 Power out
Message-ID: <BAY4-DAV58LJzbcsDFC000019fb@hotmail.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi, guys -

My recently built DSW-2 works fine, but only gets about 3W out by my WM-2
qrp wattmeter.

Dave says you should get "about 4W" out.

Do you think 3W output is reasonable?

73 -

Lee Hopper, NB7F

Date: Thu, 13 Nov 2003 11:01:18 -0800
From: Jim Pruitt <PruittJ@cwu.EDU>
To: qrp-1@Lehigh.edu, nielsen@oz.net
Subject: [161175] Re: Hamradio IP numbers
Message-ID: <sfb3648b.020@hermes.cwu.edu>
MIME-version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: quoted-printable
Content-disposition: inline

They must have changed their directory structure as the file lives in =
ftp://ftp.ucsd.edu/hamradio/ directory and you will find info at =
ftp://ftp.ucsd.edu/hamradio/amprhosts . That file is a bit long but it =
does list :

44.30.2.3	cab.k5di.ampr.org cab.k5di
44.30.2.4	rover.k5di.ampr.org rover.k5di
44.30.2.5	k5di.ampr.org k5di
44.30.2.6	mobile.k5di.ampr.org mobile.k5di

Way down the file.

There is a ampr.org file in that directory but lists it as a Lotus Notes =
file which I could not open but I could save it. I did not do that but =
found the info you were referring to in the amprhosts file.

Hope that helps.

Jim Pruitt

>>> Bob Nielsen <nielsen@oz.net> 11/13/2003 9:01:52 AM >>>
On Thu, Nov 13, 2003 at 09:44:06AM -0500, ah7i@atl.org wrote:
>=20
> http://www.easywhois.com/index.php?domain=3D44.30.0.0=20
>=20
> 73,
> -Bob
> ah7i
>=20
>=20

> On Thu, 13 Nov 2003, Karl Larsen wrote:
>=20
> >
> > I need to check somewhere and find out if any of the 44.30.x.x
> > ip numbers are assigned to k5di any more. In the packet radio days I =
got
> > several for my netrom nodes and such. I need now to set up my ax25
> > network for an aprs network on linux.
> >

That only gives the TLD information. This file lists all the 44.0.0.0
entries: <ftp://ftp.ucsd.edu/ampr.org>.=20

I couldn't connect to that server just now, but the copy I have from
February 2003 shows:

cab	IN	CNAME	cab.k5di
cab.k5di	IN	A	44.30.2.3
k5di	IN	A	44.30.2.5
mobile.k5di	IN	A	44.30.2.6
rover.k5di	IN	A	44.30.2.4

A lookup of those IPs shows they still exist in the DNS system.

You don't need a 44 address for APRS, but Linux does require an IP
assigned to the interface. I used a 192.168.x.x address when setting
up ax25 for my dx cluster on a frequency where there is no tcp/ip
activity.

73,=20
Bob N7XY

Date: Thu, 13 Nov 2003 11:02:36 -0800
From: "Lee Hopper" <leehopp@msn.com>
To: "Posting to the list QRP-L" <qrp-l@Lehigh.EDU>
Subject: [161176] FS: Zapchecker wireless installation meter
Message-ID: <BAY4-DAV2563Kbc9oLf00001a12@hotmail.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

As seen in QST (look in Advertiser index under Alan Broadband) - Zapchecker

model 270, black body with directional log-periodic antenna - perfect condition, very little use - \$275.00 to your door. Prefer PayPal, Cashier's check - personal check ok but will wait till it clears before shipping. Normally \$329 + S&H.

Reference: <http://www.zapchecker.com>

Questions? Pls contact me off list.

73 -

Lee Hopper, NB7F
Portland, OR

Date: Thu, 13 Nov 2003 14:10:29 -0500
From: "Nick Foster" <nfooster@bluefinrobotics.com>
To: "'Low Power Amateur Radio Discussion'" <qrp-l@Lehigh.EDU>
Subject: [161177] RE: li-ion batteries..
Message-ID: <000001c3aa19\$cdee0ba0\$ed00a8c0@PECKERHEAD>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="us-ascii"
Content-Transfer-Encoding: 7bit

Li-Ion batteries, depending on their chemistry, need to be charged to anywhere between 3.6 and 4.2V. Check the datasheet for the battery itself. If you're careful not to overcharge it, it's perfectly safe. Get a nice power supply and set it to the charging voltage of the battery (say, 4.2V). Current-limit the charger to 1/3 the capacity of the battery in amp-hours. So if you have a 3 amp-hour cell, charge it at 1 amp. When the voltage on the cell reaches 4.2V (or whatever its rated charge voltage is), the current will start decreasing. Let it charge like this until the charging current goes below around 200mA or thereabouts, and disconnect the cell. Let it relax for ten minutes or so, and its voltage will decrease a bit naturally. Hook it back up, charge it at its charging voltage until the current goes below 200mA, and then disconnect it. Now it's charged.

Of course, this assumes a single-cell lithium battery. Hook them up in series, and it's a whole different animal -- that's what the complex charging circuitry is for. They must be kept matched to each other in order to drain them as much as possible.

Also, if there is NO voltage at all on the cell, chances are it's dead for good -- Li-Ion batteries are hard to resuscitate if their voltage goes below their minimum rating. They also tend to offgas when

discharged too deeply. Typically, if the voltage on a cell goes below 3V, it's dead.

And don't short a Li-Ion cell. Their internal resistance is pretty low. You won't see a spark -- the voltage is far too low -- but whatever you shorted the battery with will give off a nice red glow! We've melted wrenches this way. Of course, this was a whole pack of cells, but nevertheless...

--nick

-----Original Message-----

From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf Of John J. McDonough
Sent: Wednesday, November 12, 2003 8:47 PM
To: Low Power Amateur Radio Discussion
Subject: Re: li-ion batteries..

Lithium Ion batteries are very dangerous things. If you overcharge them they can catch fire or explode. The fire cannot be extinguished with water or any normal extinguisher, and gives off toxic fumes. Be very careful.

Typically the batteries are matched to the charger and between them have triply redundant overcharge protection to avoid that problem.

Be very careful!

72/73 de WB8RCR <http://www.qsl.net/wb8rcr>
didileydadidah QRP-L #1446 Code Warriors #35

----- Original Message -----

From: "sergio" <sergio@village-buzz.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Wednesday, November 12, 2003 7:29 PM
Subject: li-ion batteries..

>
> i have a yaesu vx-1r that i bought from ebay..
>
> unfortunately, it did not come with a battery charger..
>
> i got the battery charger, and it works as an ac adapter, but the
> battery charger part seems to have problems.. i would like to figure
> out if it is the charger circuit, or of the battery is just dead..
>

> after charging, there is still no voltage on the battery.... but it
> could still be the chargin circuitry..
>
> is there any way i can test the battery alone without messing it up?
> is there anything special about the charging circuitry? can i just
> hook a voltage to it?
>
> thanks!
>
>
> ---
> peace,
> sergio
> www.village-buzz.com - "the village buzz" www.coffee-black.com - rock
> photo! <http://www.coffee-black.com/join.htm> <-- Join Picture of the
> Day!
>
> phone ... 419 606 0557 www.amazon.com/o/registry/3L7DM7FMR50QU <- buy
> me some swag!
>
>

Date: Thu, 13 Nov 2003 11:33:14 -0800
From: Wayne Burdick <n6kr@elecraft.com>
To: qrp-l@lehigh.edu
Subject: [161178] Re: KX1 Queations
Message-ID: <3FB3DC74.A5CC5D46@elecraft.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Rich,

Great questions! Here are the answers:

> 1) Why the use of 2N4124 NPN transistors instead of 2N3904s?

The issue is Q7. I tested the 2N4124 against many other NPN transistors many years ago when I first used an NPN clamp as a T-R element in a series-tuned L-C circuit. The 2N4124 has the advantage of very low capacitance when biased off--something in the 1 to 2 pF range--so it won't cause any loss of circuit Q in receive mode. When biased on (TX), the transistor limits positive signal excursions due because of the saturation voltage (Vce), and negative excursions via Vbe breakdown (about -4 to -5V). This method has been tested extensively in

several of my previous designs, including the NorCal 40A and Sierra.

We used a 2N3904 at Q5 (driver) since it out-forms a 2N4124 at the this level of Vce current. The other NPN transistors used could be of either type.

> 2) What is the advantage of using J309 over the ever popular J310?

The J309 has a much lower pinch-off voltage (typically -1 to -3 V), making it more suitable at low voltages. I've also used J310s in this mute circuit, but in the case of the KX1 I wanted the muting to continue to work even if the supply voltage on the product detector dropped into the 5 volt range. A J310 is only guaranteed to fully cut off with Vgs of 6 V, though in practice they're usually closer to 3 or 4 V.

> 3) Why not use a double tuned filter in the front of the first mixer
> instead of a single tuned circuit?

It is a double-tuned filter. The first tuned circuit is in series, formed by CA and L6, with additional capacitance placed in parallel with CA on 30 and 40 meters. The second tuned circuit is formed by L7 and its nearby capacitors. A series/parallel double-tuned circuit can perform just as well as a more conventional top-coupled dual-parallel type, but has the advantage of providing a place to attenuate the signal on transmit, in this case via Q7, the 2N4124 I mentioned above.

> 4) Why does the K1 drives it's control relays directly from the PIC but the
> KX1 goes from the PIC thru a TC4427?

To reliably drive a latching relay directly from a PIC, you need to have one end of the relay terminated in a very low impedance--much lower than one of the PIC's outputs can provide. In the case of the K1 and K2, we achieve this by using many relays in parallel, each connected to an "RY_COM" (common) line. To turn one of them on or off, all of the PIC drive outputs for the others are thrown in the opposite direction. The relays then appear to be a small resistor connected to a supply rail, providing the low Z needed. The PIC can then turn on or off the selected relay without difficulty.

In the case of the KX1, there are only two relays--not enough to provide a paralleled-coil low-resistance path. The TC4427 is a dual driver with much lower output Z than a PIC output, so it buffers the PICs relay on/off drive lines.

But that's not the only reason for the TC4427. Since the two relays are in parallel (always switched on/off together), I was able to use one of the 4427's two outputs as a "6T" (6 volts on TX) line. This is what turns the driver and pre-driver stages on and off during transmit, and the very low output Z of the

4427 can directly drive a large electrolytic capacitor (C35) to provide CW envelope shaping. R26 and C35 set the time constant of this waveform. Further, the 4427 can drive just as hard to both the supply and ground rails, so the waveform is highly symmetrical. This pre-driver/driver state has the advantage of working very well at low voltages, unlike an LT1252 video driver (which I used in the SST and K1 designs), which requires 8 volts to provide adequate output drive, and which may produce a less-symmetrical keying waveform if its supply voltage is keyed.

> 5) What is the advantage of muting both sides of the audio to the LM386?

This is not quite the right question. The question is, why use balanced feed from the product detector to the AF amp? The reason is that this reduces common-mode noise pickup and suppresses some keying artifacts, *and* gives you an increase in overall audio gain since both the NE602 and LM386 can be operated differentially.

Once you're committed to a balanced audio path, you need to mute the signal in both legs.

> 6) Is there a graph of rms audio output voltage to agc voltage to gain of the NE602?

Not that I'm aware of. As far as I know I was the first to apply AGC to an NE602/612 (in the SST, then in the K1 and now the KX1). Dave Fifield borrowed the idea for his NC20 design. In general, the gain of Gilbert-cell multipler can be reduced in this fashion as long as a degradation of IMD is tolerable. Applying the smallest possible amount of bias reduction is a good strategy, and it's important to maintain DC balance by using an RF choke (or transformer) at pins 1 and 2. There's some protection from harmonic distortion due to the preceding crystal filter, and in my tests, I noticed very little distortion in the audio channel even in the presence of near cut-off bias.

In the case of the NE602, an AGC range of something like 70 or 80 dB is possible, depending on individual device balance and the input frequency. In the K1 we applied "delayed" AGC to the RX mixer as well, resulting in a huge AGC range. You could do that in the KX1, too, by adding a resistor and an RF choke, but that's probably overkill since the KX1 has an analog RF GAIN control for the rare times when you might encounter such large signals.

> 7) Why use LEDs for the display when a LCD display would consume less power?

We pondered this question, and the answer was a little surprising.

First, this is an incredibly efficient LED display. It has a very narrow optical bandwidth, and is specifically designed for very-low-current applications. Thanks to multiplexing, the average per-segment current required in moderate lighting is only about 100 microamps! This means that a typical *total* current requirement for the display--12 segments lit--is only a little over 1 mA. Even at the brightest setting (LED=6), which is readable in outdoor daylight conditions, the entire display draws a little over 10 mA average. But in practice, settings of LED=0 to 3 are used, resulting in 1 to 3 mA of current.

It turns out that a lot of backpacking and other field use of these little rigs occurs indoors, inside tents, in the late afternoon, or in the evening, so these settings are used more often than not.

The other advantages of the LED are that it's rugged, small, and can be driven directly from a 28-pin PIC with no added driver. If we had used an LCD, we would have had to use either a 40-pin PIC or a dedicated driver IC. We would also have had to include a backlight, which would have required as much or more current than the LED display.

Finally, to make sure that the LED current would not be an issue even in bright sunlight, we added two more features to the KX1: a display-off timer (5 to 60 seconds, or infinite), and 100% audio Morse feedback. You can use the KX1 completely without the display, including the menus, all switch functions, and two VFO frequency modes.

Any other questions? :)

73,
Wayne
N6KR

--

<http://www.elecrafter.com>

Date: Thu, 13 Nov 2003 14:42:53 -0500
From: "Joseph Trombino Jr" <w2kj@bellsouth.net>
To: <leehopp@msn.com>
Cc: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [161179] Re: DSW-2 Power out
Message-ID: <001001c3aa1e\$54b08060\$220110ac@gateway.2wire.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

----- Original Message -----

From: "Lee Hopper" <leehopp@msn.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Sent: Thursday, November 13, 2003 1:42 PM

Subject: DSW-2 Power out

> Hi, guys -

>

> My recently built DSW-2 works fine, but only gets about 3W out by my WM-2
> qrp wattmeter.

>

> Dave says you should get "about 4W" out.

>

> Do you think 3W output is reasonable?

>

> 73 -

>

> Lee Hopper, NB7F

>

Howdy Lee:

My recently finished DSWII-20 put out over 4 watts but on a 13.8vdc power supply.

Believe the voltage level to the DSWII is critical in determing RF power output, i.e., are you using a 12vdc battery or lower voltage power supply than 13.8vdc???

Might give that a check and try the rig on a higher output DC power supply if you can.

73, Joe W2KJ

Date: Thu, 13 Nov 2003 14:50:02 -0500

From: John Sielke <jsielke@pobox.com>

To: qrp-1@lehigh.edu

Subject: [161180] Re: DAVCO DR-30 LISTED ON EBAY

Message-ID: <3FB3E06A.5050600@pobox.com>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii; format=flowed

Content-Transfer-Encoding: 7bit

> Folks; there is a DAVCO DR-30 on ebay. Closing in on \$300 and still 5 days
> until close.

I feel rather lucky I got one last summer for \$75.00. They are rare, but
a really nice little receiver. I will be curious what the one listed
will finally go for.

John W2AGN

Date: Thu, 13 Nov 2003 14:47:32 -0500
From: "David Hinerman" <WD8CIV@worldnet.att.net>
To: "qrp-1" <qrp-1@lehigh.edu>
Subject: [161181] travel to N. Ireland
Message-ID: <000001c3aa1e\$fad8aa30\$7a032a0a@nyroc.ametek.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Folks,

It looks like I'll be visiting Northern ireland for a few days at the
beginning of December. As far as I can tell I can operate under a CEPT
license as long as I haul along sufficient paperwork. But does anyone here
know if I need any other forms or permits in order to take my FT-817 along?

Dave

David Hinerman WD8CIV
wd8civ@worldnet.att.net

Date: Thu, 13 Nov 2003 15:12:34 -0500
From: "Ken Newman" <n2cq@dandy.net>
To: "List QRP-Canada" <qrp-canada@neale.gpfn.sk.ca>,
 "K8NI Norm Into" <normk8ni@neo.rr.com>,
Subject: [161182] [CONTEST] N2CQ QRP Contest Calendar Nov 15-31, 2003
Message-ID: <007601c3aa22\$7dfe3e90\$38eb80d1@kensdell>
MIME-Version: 1.0
Content-Type: text/plain;

charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

~~~~~  
N2CQ QRP CONTEST CALENDAR  
November 15-31, 2003  
~~~~~

40 METER FOXHUNT - Wednesday 0200z to 0400z (Tue eve USA)
Info: <http://www.cqc.org>
~~~~~

Truffle Hunt - 30 min before Fox Hunt  
Info: [http://fpqrp.com/pig\\_hunt.html](http://fpqrp.com/pig_hunt.html)  
~~~~~

ARRL Sweepstakes (Phone) ... QRP Category
Nov 15, 2100z to Nov 17, 0300z
Rules: <http://www.arrl.org/contests>
~~~~~

HOT Party (CW) ... QRP Category  
Nov 16, 1300z to 1500z (40 Meters)  
Nov 16, 1500z to 1700z (80 Meters)  
(HOMEBREW & OLDTIME - EQUIPMENT - PARTY)  
Rules: <http://www.qrpcc.de/>  
~~~~~

LZ DX CONTEST (CW) ... QRP Category
Nov 22, 1200z to Nov 23, 1200z
Rules: <http://www.qsl.net/lz1fw/contest/>
~~~~~

CQ World Wide DX Contest (CW) ... QRP Category!  
Nov 29, 0000z to Nov 30, 2400z  
Rules: <http://www.cq-amateur-radio.com/>  
~~~~~

Thanks to SM3CER, WA7BNM, N0AX(ARRL), WB3AAL and others
for assistance in compiling this calendar.

Please foreward the contest info you sponsor to N2CQ@ARRL.NET and
we will post it and give it more publicity.

Anyone may use this "N2CQ QRP Contest Calendar" for your website,
newsletter, e-mail list or other media as you choose.

(Include a credit to the source of this material of course.)

72 de

Ken Newman - N2CQ
N2CQ@ARRL.NET

<http://www.amqrp.org/contesting/contesting.html>
<http://www.n3epa.org/Pages/Contest/contest.htm>

Date: Thu, 13 Nov 2003 15:32:36 -0500
From: "John J. McDonough" <wb8rcr@arrl.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Cc: <WD8CIV@worldnet.att.net>
Subject: [161183] Re: travel to N. Ireland
Message-ID: <010401c3aa25\$4699c3e0\$090044c0@BrianBoru>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

"Sufficient paperwork" is pretty simple biz.

Your 817 should be no problem as long as you aren't also carrying an Irish-sounding last name. Actually, last time I went to IRL I took my NC-20 and had to go through British customs. My last name is the same as a number of people they don't like, so it ususally raises an eyebrow. But the time I had my rig with me, there was no issue.

If you fly direct to Shannon or Dublin without a plane change in England, you will see almost no customs until you come back into the U.S. The Irish are pretty relaxed about that. And then you will get a lovely drive up to the north, too. The challenge there is that travel in the republic is quite slow. Not that the roads are bad or anything, it's just that whenever you get out of the car, you are going to be three hours talking to somebody.

72/73 de WB8RCR <http://www.qsl.net/wb8rcr>
didileydadidah QRP-L #1446 Code Warriors #35

----- Original Message -----

From: "David Hinerman" <WD8CIV@worldnet.att.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Thursday, November 13, 2003 2:47 PM
Subject: travel to N. Ireland

> Folks,

>

> It looks like I'll be visiting Northern ireland for a few days at the
> beginning of December. As far as I can tell I can operate under a CEPT
> license as long as I haul along sufficient paperwork. But does anyone here
> know if I need any other forms or permits in order to take my FT-817
along?

>

> Dave

>
> -----
> David Hinerman WD8CIV
> wd8civ@worldnet.att.net
>

Date: Thu, 13 Nov 2003 12:34:19 -0800
From: "Doug Hendricks" <ki6ds@dpol.net>
To: <qrp-l@Lehigh.EDU>
Subject: [161184] Re: KX1 Queations
Message-ID: <028901c3aa25\$83fccac0\$4a0b0d0a@dph.dpol.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Wayne, what a marvelous posting. Excellent contribution to qrp-l. Thank you for taking the time to do it.

Guys, we need more of this. Don't you agree? (Don't start a thread, just nod your head in a direction that indicates your agreement or disagreement, grin.). 72, Doug

Date: Thu, 13 Nov 2003 16:04:34 EST
From: JClinton46@aol.com
To: n6kr@elecraft.com, qrp-l@lehigh.edu
Subject: [161185] Re: KX1 Queations
Message-ID: <157.277fe05a.2ce54be2@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Wayne,

While I didn't ask the original questions (don't know enough to ask them ;^)
) I did learn a lot from your answers. Thanks!

I'm sure others could have also answered these questions as this is a talented group but it would have still been speculation. Where else can you find out the rationale from the designer? Certainly not with a rice box.

Thanks again and 73,
Clint Poss
KE4FDT

Date: Thu, 13 Nov 2003 22:44:48 +0100 (CET)
From: "=?iso-8859-1?q?Miguel=20Angel=20D.J.?= " <ea1bp@yahoo.es>
To: qrp-1@Lehigh.EDU
Subject: [161186] WANTED: HEATHKIT HW-9 WARC KIT
Message-ID: <20031113214448.88804.qmail@web20008.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=iso-8859-1
Content-Transfer-Encoding: 8bit

If you have one and you want to sell it...

Send me an email...
ea1bp@yahoo.es

Thanks,

Miguel

Yahoo! Messenger - Nueva versi n GRATIS
Super Webcam, voz, caritas animadas, y m s...
<http://messenger.yahoo.es>

Date: Thu, 13 Nov 2003 14:26:59 -0800
From: Bob Nielsen <nielsen@oz.net>
To: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [161187] Re: Hamradio IP numbers
Message-ID: <20031113222659.GB31148@n7xy.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

On Thu, Nov 13, 2003 at 11:39:19AM -0700, M.M. wrote:

> At 10:01 11/13/03, Bob Nielsen wrote:

>

> >That only gives the TLD information. This file lists all the 44.0.0.0

> >entries: <<ftp://ftp.ucsd.edu/ampr.org>>.

> >

> >I couldn't connect to that server just now, ...

>
>
> Try ftp://ftp.ucsd.edu/hamradio/ampr.org. They musta moved it...
>

No, but I omitted the directory in my post. I still can't get a connection (actually I can connect, but it never completes the login).

Date: Thu, 13 Nov 2003 14:30:27 -0800
From: Bob Nielsen <nielsen@oz.net>
To: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [161188] Re: travel to N. Ireland
Message-ID: <20031113223027.GC31148@n7xy.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

On Thu, Nov 13, 2003 at 03:32:36PM -0500, John J. McDonough wrote:

> "Sufficient paperwork" is pretty simple biz.
>
> Your 817 should be no problem as long as you aren't also carrying an
> Irish-sounding last name. Actually, last time I went to IRL I took my NC-20
> and had to go through British customs. My last name is the same as a number
> of people they don't like, so it ususally raises an eyebrow. But the time I
> had my rig with me, there was no issue.
>
> If you fly direct to Shannon or Dublin without a plane change in England,
> you will see almost no customs until you come back into the U.S. The Irish
> are pretty relaxed about that. And then you will get a lovely drive up to
> the north, too. The challenge there is that travel in the republic is quite
> slow. Not that the roads are bad or anything, it's just that whenever you
> get out of the car, you are going to be three hours talking to somebody.

Probably over a few pints of Murphy's!

Date: Thu, 13 Nov 2003 17:41:33 -0500
From: Rick McKee <kc8aon@juno.com>
To: qrp-l@Lehigh.EDU, fpqrp-l@fpqrp.com
Subject: [161189] Invitation to MQFD group
Message-ID: <20031113.174140.10046.1.kc8aon@juno.com>

For some reason, my invitations from the new MQFD group site have failed to get here, so I'll just post it direct.

MQFD is coming up in a couple of weeks for those brave enough to venture out in the cold ! And I have created a new group that caters to the MQFD event to which everyone interested is invited to join. Not much there yet, but there are provisions on the site to upload files suchs as pictures of your MQFD station setup, stories about your experiences in the field, operating ideas, or plans for projects etc. So, if QRP field operating is your thing, please consider joining - it's free of course ! Here's the link to the site: <http://www.smartgroups.com/groups/mqfd>

Hope to see you there !

72/73

Rick McKee KC8AON

The best thing to hit the internet in years - Juno SpeedBand!
Surf the web up to FIVE TIMES FASTER!
Only \$14.95/ month - visit www.juno.com to sign up today!

Date: Thu, 13 Nov 2003 17:57:03 -0500
From: Kevin Gunther <beeltee@optonline.net>
To: nielsen@oz.net,
 Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [161190] Re: travel to N. Ireland
Message-ID: <002701c3aa39\$7b15cd30\$9b825643@cdghome>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7BIT

----- Original Message -----

From: "Bob Nielsen" <nielsen@oz.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Thursday, November 13, 2003 5:30 PM
Subject: Re: travel to N. Ireland

> On Thu, Nov 13, 2003 at 03:32:36PM -0500, John J. McDonough wrote:
> > "Sufficient paperwork" is pretty simple biz.
> >
> > Your 817 should be no problem as long as you aren't also carrying an>
> Probably over a few pints of Murphy's!

Or Smithwick's

>

Date: Thu, 13 Nov 2003 18:23:05 -0500
From: "Alan Fryer" <N3BJ@hotmail.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [161191] Re: KX1 Queations
Message-ID: <LAW9-0E37e2U8QVjp3b00001221@hotmail.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I agree with Doug - what a great explanation of design optimization. This really adds to the understanding and enjoyment of the hobby and what it's all about !

Well done, Wayne, keep movin'.....

Alan, N3BJ
Bent Mountain, VA

Date: Thu, 13 Nov 2003 17:43:04 -0600
From: "Mike Duke, K5XU" <k5xu@jam.rr.com>
To: "qrp list" <qrp-l@lehigh.edu>
Subject: [161192] The 44/88 Foot Dipole expanded for 160 Meters?
Message-ID: <010401c3aa3f\$e40b1920\$83d0a418@jam.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Has anyone found the magic length for employing the concept of the 44 and 88 foot dipole to a length which will work for 160 meters?

My limited antenna logic tells me that the length would be somewhere around 176 feet. I know this length works well as an end-fed inverted L.

But, if it is center fed, on which higher bands will it give a dipole pattern?

Mike Duke, K5XU
American Council of Blind Radio Amateurs

End of QRP-L Digest 3103
